REMARKS

Applicant's confirms the oral election was traverse of Group I, claims 1-14. Upon reconsideration, the traverse is withdrawn and the non-elected claims have been cancelled without prejudice to applicant's right to file an appropriate continuing application directed thereto.

The claims have been rejected under 35 U.S.C. 112 with respect to the recitation of "thin film". It is respectfully pointed out that this language appears in the preamble of the claim and the terminology "thin film" is well known, clear and definite to those of ordinary skill in this art. In that connection, the Examiner will observe that the primary reference Hayashi extensively refers to thin films. Further, as shown on the attachment, more than 9000 patents have used the term "thin film" in their claims since 1996. As to the temperature, claim 1 has been amended to recite that this is the temperature during formation of the complex oxide thin film. In this connection, see, inter alia, Table 1 on page 10.

In light of the foregoing remarks and amendment, withdrawal of the rejection under § 112 is respectfully solicited.

Claims 1-3, 9 and 12-14 were rejected under 35 U.S.C. 103 over Hayashi and Solayappan, and claims 4-8 and 10-11 over the same combination further in view of Ogi. Both of these rejections are respectfully traversed.

Applicant disagrees with numerous of the assertions made in explaining these rejections, some of which are believed to be hindsight reinterpretation of that which is actually set forth by the references. For instance, the assertion that the fact that a heat treatment can occur while drawing a vacuum suggests the pressure is less than

during deposition does not necessarily follow since drawing a vacuum could be to a higher pressure than the vacuum drawn during deposition. Rather than detail all of such instances, this response will, for convenience, focus on a major deficiency in the rejection. Claim 1 includes a step of forming the complex oxide film at a temperature equal to or higher than the boiling point of the solvent. This is not suggested in any of the cited references.

The Office Action avers that Hayashi teaches the solvent has a boiling point greater than 100°C., citing column 6. What the reference actually teaches in column 6 is that a variety of possible solvents can be used and the one which has the lowest boiling point is toluene at 111°C. Thus, the reference teaches using a solvent having a boiling point of at least 111°C. The Office Action correctly points out that the temperature of the substrate during deposition can be 100°C but it will be further noted that the teaching indicates that such temperature is preferably 15 to 40°C. Therefore, the temperature during deposition will always be lower than the boiling point of the solvent by at least 11°C., and more likely at least 51°C. Claim 1, however, calls for exactly the reverse, namely that the temperature during deposition is at least equal to the boiling point of the solvent and can be higher. There is nothing in the reference which teaches such a feature.

The Office Action makes reference to a drying temperature and indicates that the drying temperature would be higher than the boiling point of the solvent. It will be appreciated that the drying in Hayashi occurs after the film has been formed. Teaching heating complex oxide film which has already been formed for drying purposes does not suggest forming the film at a temperature equal to or higher than the

boiling point of a solvent. Quite to the contrary, drying implies a higher temperature than that used during deposition.

In view of this basic deficiency in the rejection, it is respectfully submitted that all of the prior art rejections should be withdrawn and that this application is in condition to be allowed. Accordingly, the early issuance of a Notice of Allowance is respectfully solicited.

Respectfully submitted,

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APPENDIX A
Version With Markings To Show Changes Made
37 C.F.R. § 1.121(b)(1)(iii) AND (c)(1)(ii)

CLAIMS:

1. A method of producing a complex oxide thin-film comprising the steps of:

(a) providing a metal compound solution comprising at least two metal compounds dissolved in a solvent;

(b) atomizing the metal compound solution in a two-fluid nozzle, and directly introducing the atomized solution into a film-forming chamber in which the pressure is about 100 Torr or lower and having a substrate therein, and

(c) forming a complex oxide thin-film on a substrate in the film-forming chamber [to] <u>at</u> a temperature equal to or higher than the boiling point of the solvent.